

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method for ~~copying~~ creating a second virtual disk or a new snapshot disk using the contents of a first virtual disk, comprising:

providing ~~defined by~~ a first table having one or more entries that associate original segments of the first virtual disk with location in one or more storage ~~containers, the method comprising the step of~~ containers; and

copying the entries of the first table to a second table to create a second virtual disk.

Claim 2 (original): The method of claim 1, further comprising the step of modifying the first table to prevent write operations to the first virtual disk.

Claim 3 (original): The method of claim 2, wherein the step of modifying the first table comprises activation of a Nw state.

Claim 4 (original): The method of claim 2, wherein the step of modifying the first table comprises activation of an invalid state.

Claim 5 (original): The method of claim 1, further comprising the step of delaying input/output (I/O) operations to the first or second virtual disk.

Claim 6 (original): The method of claim 5 wherein in the step of delaying I/O operations comprises delaying I/O operation for a prespecified time period.

Claim 7 (original): The method of claim 5 further comprising the step of canceling the delay of I/O operations.

Claim 8 (currently amended): The method of claim 1 further comprising the steps of:
receiving a write operation to one of the original segments of the first virtual disk;

~~creating~~ allocating a new segment for the second virtual disk;
copying the contents at the original segment to the new segment; and
completing the write operation to the new segment.

Claim 9 (original): The method of claim 8, wherein a controller stores a first copy of the first table, an agent stores a second copy of the first table, and the step of creating a new segment further comprises creating a new segment in the first copy and transferring data from the first copy to the second copy so that the new segment is created in the second copy.

Claim 10 (currently amended): The method of claim 1 further comprising the steps of:

receiving a write operation to one of the original segments of the first virtual disk;

~~creating~~ allocating a new segment for the second virtual disk;
copying the contents at the original segment to the new segment; and
completing the write operation to the original segment.

Claim 11 (original): The method of claim 10, wherein a controller stores a first copy of the first table, an agent stores a second copy of the first table, and the step of creating a new segment further comprises creating a new segment in the first copy and transferring data from the first copy to the second copy so that the new segment is created in the second copy.

Claim 12 (currently amended): A method for mapping a virtual disk segment to a storage location within a storage device, said method comprising the steps of:

allocating ~~creating~~ a new segment of storage space for a virtual disk;

copying an existing ~~virtual~~ segment of data for another virtual disk into said new segment of storage space;

updating at least one mapping table corresponding to the existing ~~virtual~~ segment of data, said table having an entry corresponding to the new segment of storage space; and

~~store~~ storing the mapping table in memory.

Claim 13 (original): The system of claim 12, wherein the memory is volatile.

Claim 14 (original): The system of claim 12, wherein said storage location comprises a block of data within the storage device.

Claim 15 (original): The system of claim 14, wherein the segment of data is about 1 MB.

Claim 16 (original): The system of claim 12, wherein the memory resides on an agent coupled to the host.

Claim 17 (currently amended): A method for maintaining a table for mapping virtual disk blocks to storage locations on storage devices within a network, comprising:

receiving a command from a controller at an agent storing the table;

activating states within entries of the table;

completing input/output (I/O) operations at the table; and

updating the table in response to the command.

Claim 18 (currently amended): The method of claim 17, further comprising setting a blocking flag until I/O operations are completed.

Claims 19-20 (canceled)
